

**METHODS AND DEVICES FOR
PROVIDING OPTICAL, SERVICED-ENABLED CROSS-CONNECTIONS**

ABSTRACT OF THE DISCLOSURE

A technique for improving optical cross-connections comprises placing a switch in front of a number of processing units. So configured, the units are no longer dedicated to a specific link or signal. When necessary, a unit is connected/disconnected to one or more optical links by the switch to carry out any number of processing functions, such as regeneration, Raman pumping, dispersion equalization/compensation or performance monitoring. Because the units are no longer dedicated to specific links the cost of the cross-connections and the network it is a part of can be reduced.